

## **Symposium 21: Opioids revisited: new developments and opportunities for opioid pharmacology**

**Sponsored by the British Pharmacological Society**

**Theme: Neuronal, glial and cellular mechanisms**

**Wednesday 12<sup>th</sup> April, 9:00 – 10:40**

This session will revisit opioid system through presentation of the most recent and exciting research findings in this field. Selected speakers will show how innovative approaches and application of new state-of-the-art technology revealed novel aspects of opioid pharmacology and signaling as well as its potential therapeutic implications. While this topic aims to target professionals who identify their research interest in this particular area of pharmacology, a much broader audience will benefit from the session e.g. researchers interested in novel approaches to study biased receptor signaling (phosphoproteomics and accelerated molecular dynamics), GPCR desensitization mechanisms or in application of in vivo functioning imaging. We feel that the broad appeal and the innovative nature of the novel techniques, approaches and methodologies presented in this symposium together with the demonstration of new theories concerning GPCR pharmacology will generate a lot of interest and enthusiasm not only to scientists and professionals in the opioid field but also to the wider pharmacology community.

Chair: Dr Ilona Obara (Durham University)

Co-Chair: Dr Alexis Bailey (St George's University of London)

Speaker 1: Dr Chris Bailey (University of Bath)

'Mechanisms of  $\mu$ -opioid receptor desensitization and tolerance'

Speaker 2: Professor Eamonn Kelly (University of Bristol)

'Ligand bias at  $\mu$ -opioid receptor'

Speaker 3: Professor Charles Chavkin (University of Washington, USA)

'Ligand directed signalling mechanisms at the  $\kappa$ -opioid receptor'

Speaker 4: Dr Ream Al-Hasani (Washington University School of Medicine, USA)

'Optogenetics and a novel view on  $\kappa$ -opioid receptor pharmacology'